

NEMA LED Dimming Compatibility Program Update

October 23, 2017



Background

ENERGY STAR Lamps v1.1 Specification and ENERGY STAR Lamps v2.0 States:

Dimmer Testing ... As an alternative, a lamp designed to be compliant with NEMA SSL7A may be tested against all dimming performance requirements with a corresponding NEMA SSL7A compliant dimmer²

²The compatibility testing pathway of NEMA SSL7A is available once the marketing guidelines for matching compliant lamps to compliant dimmer types have been set.

The goal of this project was to set those marketing guidelines.



Elements of the Marketing Guidelines

Logo

Placed on lamp packaging and dimmer packaging for products meeting use criteria

Point of Purchase content

Logo with optional explanatory statement and QRL option

Use Criteria/MOU

Right to use logo requires signed MOU/license with NEMA, committing to comply with use criteria, testing and certification, logo marking specifications, and payment of fee.

One-pager

Explains compatibility and logo

For licensee use in developing marketing materials

For retailer use in training employees to answer customer questions

NEMA webpage supporting QRL



Logo:



Statement:

Look for this logo to find LED bulbs and dimmers that work together.



Use Criteria

LED Lamps that meet the following:

- 1. the requirements in clauses 12.2, 12.3, and 12.5 for dimming and audible noise set forth in EPA ENERGY STAR Program Requirements Product Specification for Lamps (Light Bulbs) Eligibility Criteria Version 2.1;
- 2. the requirements in NEMA SSL-7A-2016;
- 3. the requirements in NEMA-77-2017;
- 4. listed to UL1993 or CSA-C22.2 No. 1993-17.

Dimmers that meet the following:

- 1. the requirements in NEMA SSL-7A-2016;
- 2. the requirements in NEMA-77-2017;
- 3. listed to UL 1472 or CSA-C22.2 No. 184.1.



Use Criteria, cont'd

- Use charges apply for NEMA and non-NEMA members
 - NEMA members:
 - \$500 one time use fee for NEMA members' brands
 - Non-NEMA members:
 - \$1,000 one time use fee per brand
 - \$500 annual fee per brand

- MOU language completed
 - Available for signature



Additional Communication Materials

- One-page FAQ
 - To help retail customers communicate to consumers

NEMA website to support mark

- Targets licensees and retailers
- Dimming video to demonstrate what 20% dimming looks like, and that many products can dim to 10%.
- One-page FAQ posted for download
- Link for brand owners/brand licensees to request MOU
- List of labeled brands



Layout of one-page FAQ

Market Guidance one-page document for retailer/trade/brand owner/brand licensee use:

NEMA is helping consumers identify compatible LED light bulbs and dimmers. This logo and optional statement may begin to appear on the packages of LED lamps and dimmers to show consumers how to identify compatible products.

Logo:



Optional Statement: Look for this logo to find LED bulbs and dimmers that work together

What does the logo mean for consumers?

When the logo appears on the package, consumers know that the LED bulb or dimmer inside has been designed to be compatible with dimmers or bulbs that have the same logo on their package. Bulbs and dimmers can also be matched across Brands. A Brand A bulb, for example, can be used with a Brand B dimmer, as long as both have the logo on their packages. The logo identifies products that will dim down to 20% of the maximum light level. Many LED bulbs can dim lower. Check bulb packaging for more information.

What happens if I buy one product with the logo and one without?

The LED lamp and dimmer may work together, and may perform well. However, there is also a possibility that the bulb may flicker, or both may hum. To avoid potential consumer dissatisfaction, it is better to use bulbs and dimmers that both have the logo on their packages.

How can the logo be used?

Licensees who sign the LED dimming Memorandum of Understanding with NEMA may associate the logo with any bulb or dimmer that meets the required performance and compatibility criteria.

The logo will appear on the product packaging. It may also appear on the product itself.

The logo and the statement should appear together

- On point-of purchase display, in-store signage, etc.
- · On product information pages.
- . In retailer's product descriptions online, in print, etc.
- · On Licensees' websites.

For more information go to: nema.org/led-dimming

The National Electrical Manufacturers Association (NEMA) is the association of electrical equipment and medical imaging manufacturers.



Questions on the one-page FAQ

What does the logo mean for consumers?

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Questions on the one-page FAQ, cont'd

How can the logo be used?

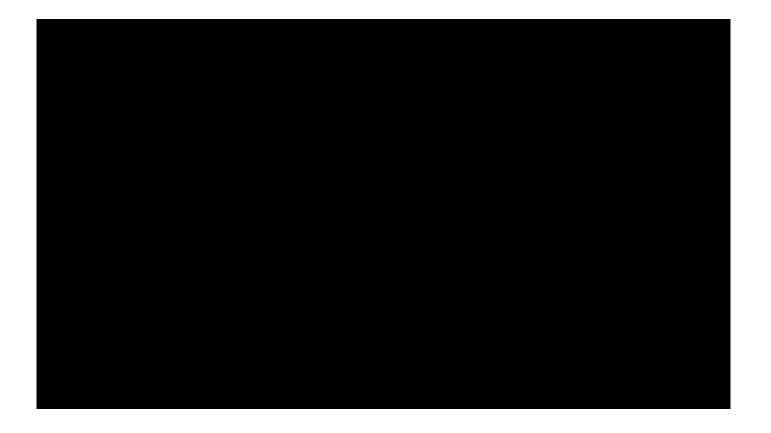
Brand owners/brand licensees who sign the LED dimming Memorandum of Understanding with NEMA may associate the logo with any bulb or dimmer that meets the required performance and compatibility criteria.

The logo will appear on the product packaging. It may also appear on the product itself.

The logo and the optional statement should appear together

- On point-of purchase display, in-store signage, etc.
- On product information pages
- In retailer's product descriptions online, in print, etc.
- On Licensees' websites

Video





Questions

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Background

Consumer Research



Trademark and Research (con't)

- Online survey/500 participants/Ages 25+, men and women, homeowners, DIY shoppers
 - Questions about logo
 - Questions about logo and statement combination

- Consumer research completed mid-November 2015
- Two summary slides follow

Logo Only

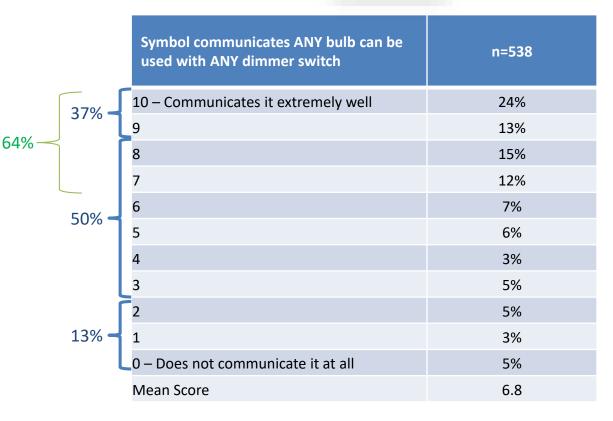
Consumers were shown the logo and asked directly how well it communicated the idea that ANY bulb can be used with ANY switch.



By itself, only 37% of respondents felt that the logo communicated extremely well that ANY bulb could be used with ANY switch.

However, over half did say 7 or above.

Interestingly, There was no significant difference between those who have purchased LED and those who had not.





Logo and Statement

Later in the survey, they were shown the logo with the statement and again asked how well it communicated the idea.



Look for this logo to find LED bulbs and dimmers that work together.

Adding the statement onto the display greatly improved understanding that the logo means ANY bulb with ANY switch.

Over half said it communicates extremely well, and 80% rated it a 7 or above.

| | | Statement in addition to symbol communicates ANY bulb can be used with ANY dimmer switch | n=538 |
|-----|-------|--|-------|
| 80% | 54% | 10 – Communicates it extremely well | 36% |
| | | 9 | 18% |
| | 41% - | 8 | 17% |
| | | 7 | 9% |
| | | 6 | 5% |
| | | 5 | 6% |
| | | 4 | 3% |
| | | 3 | 1% |
| | 5% | 2 | 3% |
| | | 1 | 0% |
| | | 0 – Does not communicate it at all | 2% |
| | | Mean Score | 7.9 |

